



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/725,032 | 11/29/2000 | Mikio Sanada | 35.C14959 | 8953 |

5514 7590 12/06/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

RAYFORD, SANDRA M

ART UNIT PAPER NUMBER

1772

DATE MAILED: 12/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/725,032

Applicant(s)

SANADA ET AL.

Examiner

Sandra M. Nolan

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 23-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claims

1. Claims 1-71 are pending. Claims 1-15 and 23-71 have been withdrawn as non-elected. Accordingly, claims 16-22 are treated here.

Rejections Maintained

2. The 35 USC 112 rejection of claims 16-22 as indefinite is maintained for reasons of record.
3. The 35 USC 102 rejection of claims 16 and 21, as anticipated by Matsushita (US-5,958,988) is maintained for reasons of record.
4. The 35 USC 102 rejection of claim 16 as anticipated by Choudhery (US 6,121,387) is maintained for reasons of record.
5. The 35 USC 103 rejection of claim 17 as unpatentable over Choudhery or Matsushita is maintained for reasons of record.

Rejection Withdrawn

6. The 35 USC rejection of claim 21 is withdrawn in view of the amendment to that claim in the 23 September 2004 response.

Allowable Subject Matter

7. Claims 18-20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. See section 18 of the 23 June 2004 office action.

Response to Arguments

8. Applicant's arguments filed in the last response have been fully considered but they are not persuasive.

On page 22, applicants argue that the phrase "finely fractionalized polymer" is defined in paragraph 0074 and that the claims are not indefinite.

However, this explanation is not persuasive. Without an expression in the claims of what type of fractionalization is being carried out, they remain indefinite.

On pages 22-25, applicants argue that the 35 USC 102 rejection of claims 16 and 21 is improper.

However, the summation of the invention and the statement the Matsushita does not modify the surface of its objects by the type of fractionalization claimed here are not persuasive. The claims do not specify what kind of fractionalization is taking place. In addition, the claims are drawn to elements, and not to processes. In the absence of convincing objective evidence otherwise, it is proper to reject the claims over references that teach the features recited therein—or at least that teach things that are equivalent, based on the examiner's best understanding of those features.

On page 25, applicants argue that there is cleaving and reorganizing/reorientation of polymeric materials going on their surfaces.

However, the claims do not recite these features. Accordingly, those arguments are not persuasive.

On page 25, applicants argue that Choudhery does not teach finely fractionalizing polymers on its surfaces.

However, the examiner is sure what finely fractionalizing entails. As best understood by the examiner Choudhery's technique involves such fractionalization.

On page 25, applicants argue that Choudhery does not teach the re-polymerization and re-orienting that applicants carry out.

However, the claims do not call for such re-polymerization and re-orienting.

Lastly, in the absence of convincing objective evidence to the contrary, the interfacial energy features recited in applicants' claims are deemed latent properties in the products suggested by Matsushita and Choudhery. See MPEP 2145(ii).

Final Rejection

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

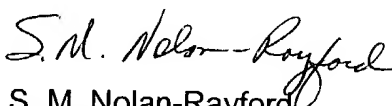
Art Unit: 1772

Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can normally be reached Monday through Thursday, from 6:30 am to 4:00 pm, Eastern Time.

If attempts to reach the examiner are unsuccessful, her supervisor, Harold Pyon, can be reached at 571/272-1498.

The fax number for patent application documents is 703/872-9306.


S. M. Nolan-Rayford
Primary Examiner
Technology Center 1700

09725032(20041203)